

SUMMARY OF DATA

PURPOSE

A general purpose low power (50 watts) HF AM transmitter for communication between ship/ship, ship/shore and ship/air. It is fitted as one of the main wireless transmitters and replaces the H/F side of Types 52 FHV, 60 FR and 60DR.

TYPE OF TRANSMISSION

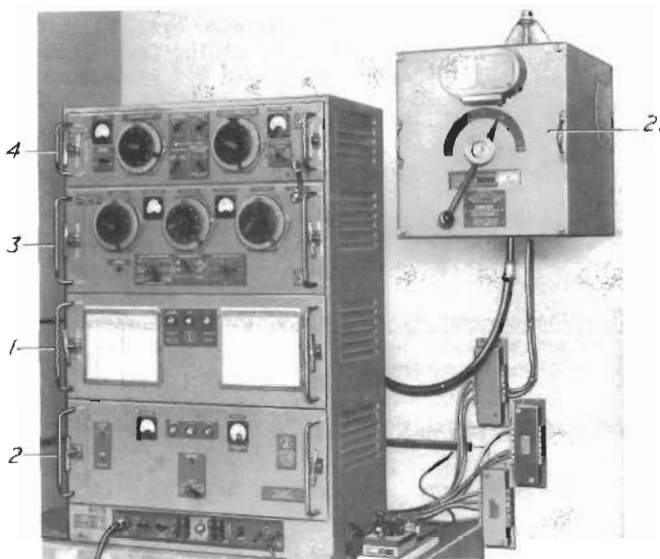
CW, MCW, and Voice.

FREQUENCY RANGE

1.5 - 24.0 MHz.

MAJOR UNITS

Type 601 and 601D comprises the following units:-



GENERAL VIEW OF EQUIPMENT

Unit	Patt. No.	DESCRIPTION	PHYSICAL DATA			
			Height	Width	Depth	Weight
1	W8358	Rectifier	10½ in	2 ft 5 in	1 ft 5 in	130 lb
2	W8359	Modulator and Rectifier Unit Des. A	10¾ in	2 ft 4¾ in	1 ft 2 ¹³ / ₁₆ in	140 lb
3	W8360	Transmitter 5AB	10½ in	2 ft 4¾ in	1 ft 5 in	80 lb
4	W8361	Aerial Tuning Unit for TX 5AB	7½ in	2 ft 4¾ in	1 ft 3½ in	40 lb
6	W8357	Framework with Control Panel for Type 601	3 ft 8 in	2 ft 5½ in	1 ft 3 in	200 lb
21	56770	Switch Aerial C.O. for Type 601, 602/E	1 ft 5 in	1 ft 4½ in	11½ in	110 lb

Units 1, 2, 3 and 4 are separate panels housed in Unit 6, Unit 21 is external.

ANCILLARY EQUIPMENT

Patt. No.	DESCRIPTION	REMARKS
53325	Rectifier Unit Des. 46	Only fitted in cruisers and above and ships fitted with Wireless and Voice Control Outfits KHA Series.
65416	Attenuator Unit Des. 29	Only fitted with Wireless and Voice Control Outfits KHA Series.

BRIEF DESCRIPTION OF MAJOR UNITS

Rectifier Unit SE13 - Provides the D.C. and A.C. supplies for Transmitter 5AB, Patt. 8358.

Modulator and Rectifier Unit Des. A, Patt. W8359 - A 50 watt modulator containing its own power pack which modulates the final stage of Transmitter 5AB with either a M.C.W. note (800 - 1200 Hz as desired) or Voice covering the audio band (200 - 700 Hz). Automatic Gain Control is incorporated and is preset to give 70% modulation on Voice. The voltage output of the M.C.W. oscillator is preset to give 90% modulation.

Transmitter 5AB, Patt. W8360

- Frequency - 1.5 - 24 MHz.
- Frequency Control - partial Crystal Control from 3.0 to 24.0 MHz.
- Variable-Frequency Oscillator from 1.5 to 3.0 MHz.
The frequency of the Crystal Oscillator is 0.5 MHz, and the Variable Oscillator frequency range is between 0.5 and 1.0 MHz.
- Output - 50 watts (approximately) into load resistance of 100 ohms.
- Keying - Maximum of 120 words per minute.

Aerial Tuning Unit for Transmitter 5AB, Patt. W8361 - Comprises a combination of inductors and capacitors, the circuit being tunable over a wide range to provide maximum transference of power from the transmitter to the aerial. This unit also contains a Dummy Load, with a meter for measuring R.F. current.

Aerial Change-over Switch, Patt. 56770 - A six-position switch giving the following facilities:- 1. Spare, 2. Connects Aerial to transmitter, 3. Earths Aerial through Resistor, 4. Isolates Aerial, 5. Connects Aerial to a Receiver, 6. Spare.

POWER REQUIREMENTS AND CONSUMPTION

- Power Supply - 230 volts 50 Hz single phase
- Power Consumption - 350 watts on CW
600 watts on MCW or Voice

CONTROL CIRCUITS

- Type 601 can be operated in 'Local Control' or with any of the standard Voice and Wireless Control Outfits.
- Type 601D works with the standard Central wireless System Control Outfits (KDA Series).

HEAT DISSIPATION 500 watts

AERIAL SYSTEM

The Aerial Tuning Unit for Transmitter 5AB will accommodate any aerial of 30 ft or longer including whip aeriels.

REMARKS

A 'Man Aloft' board is provided on the front of the Aerial Change-over Switch.

Wavemeter Outfit GN or GJ is not required for the calibration of Transmitter 5AB since the accuracy of the Partial Crystal Control Circuit is of the same order as these wavemeters. Calibration is effected by making use of the Crystal Oscillator

The Aerial circuit CANNOT be tuned without breaking wireless silence. Transmitter 5AB CAN be tuned and tested using the Dummy Load and the Aerial earthed.

HANDBOOK BR 1466(1)(2)

ESTABLISHMENT LIST E696

INSTALLATION SPECIFICATION
8647- General Fitting
3684 - Fitting in 'T' Class Submarines
3551 - Fitting in HMS VANGUARD.